OIPE

RAW SEQUENCE LISTING   DATE: 07/19/2001
PATENT APPLICATION: US/09/775,181   TIME: 12:02:41

Input Set : **A:\LEX-0129-USA SEQLIST.txt**
Output Set: **N:\CRF3\07192001\I775181.raw**

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   4 <110> APPLICANT: Donoho, Gregory
   5        Hilbun, Erin
   7 <120> TITLE OF INVENTION: Novel Human Membrane Proteins and
   8        Polynucleotides Encoding the Same
  11 <130> FILE REFERENCE: LEX-0129-USA
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/775,181
C--> 13 <141> CURRENT FILING DATE: 2001-02-01
  13 <150> PRIOR APPLICATION NUMBER: US 60/180,414
  14 <151> PRIOR FILING DATE: 2000-02-04
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  18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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  22 <212> TYPE: DNA
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  28 aaggggaagc cgcacgccca gcagccgggt cgagcctctg cctcggactc ctcggctccc    180
  29 tggagccgct ccaccgatgg caccatcttg gcgcagaaac tcgccgagga ggtgcccatg    240
  30 gacgtggcct cttacctcta caccggggac tcccaccagc tgaagcgagc caactgctcc    300
  31 ggccgctacg agttggcggg cctgccgggg aagtggccag ccctggccag cgcgcacccc    360
  32 tccttgcacc gggcgctgga cacactgaca cacgccacca acttcctcaa cgtgatgctg    420
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  36 atcctgctcc aagacctgtc ctcctccgca ccccacctgg ccaacgccac tctggagacc    660
  37 gagtggttcc acggcctccg gcgcaagtgg aggccccact acaccgccg cggccccaat    720
  38 caggggcccc ggggcctggg ccacagctgg cggcgcaagg acgggctcgg cggggacaag    780
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  41 aggggtgtca tgaaagttga cataaatctt cagaaagtgg acattgacca atgctcaagt    960
  42 gatggctggt tttcaggaac tcataaatgc cacctcaaca attcagagtg tatgccaatt   1020
  43 aaaggcctag gattcgttct tggagcctat gagtgcattt gcaaagcagg attctatcat   1080
  44 cctggagtct taccagtgaa caactttcgg agaaggggtc cggatcagca tatttcagga   1140
  45 agtacaaaag atgtgtcaga agaagcctat gtctgcctac cttgcaggga gggctgcccc   1200
  46 ttctgtgctg atgacagccc atgcttcgtc caggaagata agtatttacg acttgccatc   1260
  47 atctccttcc aaggcctgtg tatgctgctc gacttcgtta gcatgctggt ggtctaccac   1320
  48 tttcgcaaag caaagagcat ccgggcatcg ggccttatcc tgttggaaac gatcctttt   1380
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  55 atgacagcag ttgctgaatt tttattcctc ttgtggggtg tttatctctg ctatgcagtg   1800
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59 ttgcttttga ttccaaagtt ttcacattca agcaataacc cacgagatga tattgctaca   2040
60 gaagcatatg aggatgagct agacatgggc cgatctggat cctacctgaa cagcagtatc   2100
61 aattcagcct ggagtgagca cagcttggat ccagaggaca ttcgggacga gctgaaaaaa   2160
62 ctctatgccc aactggaaat atataaaaga aagaagatga tcacaaacaa cccccacctc   2220
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68 gaggagacaa cagaaaattc cacactggaa tccctgtcgg gtaaaaaact aacacaaaaa   2580
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81 gaggagaacg gaggtcagcc tcgtgcagcc aatgtgtgtg ctgggcagag cgaagaactg   3360
82 cccccccaaag ctgtagcatc aaaaacagag aatgaaaatc tcaaccaaat aggacaccag   3420
83 gaaaaaaaga catcttcttc tgaggagaat gtgcgtggct cctataactc aagtaataac   3480
84 ttccagcaac ctttaacatc acgagcagag gtttgtcctt gggagtttga accccagct   3540
85 caaccaaatg ctggaagaag tgtagcttta cctgcctctt ctgctctaag tgcaaataag   3600
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90 <212> TYPE: PRT
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97            20                  25                  30
98 Asp Ser Pro Arg Glu Arg Thr Pro Lys Gly Lys Pro His Ala Gln Gln
99           35                  40                  45
100 Pro Gly Arg Ala Ser Ala Ser Asp Ser Ser Ala Pro Trp Ser Arg Ser
101      50                  55                  60
102 Thr Asp Gly Thr Ile Leu Ala Gln Lys Leu Ala Glu Glu Val Pro Met
103 65                  70                  75                  80
104 Asp Val Ala Ser Tyr Leu Tyr Thr Gly Asp Ser His Gln Leu Lys Arg
105                85                  90                  95
106 Ala Asn Cys Ser Gly Arg Tyr Glu Leu Ala Gly Leu Pro Gly Lys Trp
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110 Leu Thr His Ala Thr Asn Phe Leu Asn Val Met Leu Gln Ser Asn Lys
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112 Ser Arg Glu Gln Asn Leu Gln Asp Asp Leu Asp Trp Tyr Gln Ala Leu
113 145                 150                 155                 160
114 Val Trp Ser Leu Leu Glu Gly Glu Pro Ser Ile Ser Arg Ala Ala Ile
115                 165                 170                 175
116 Thr Phe Ser Thr Asp Ser Leu Ser Ala Pro Ala Pro Gln Val Phe Leu
117                 180                 185                 190
118 Gln Ala Thr Arg Glu Glu Ser Arg Ile Leu Leu Gln Asp Leu Ser Ser
119     195                 200                 205
120 Ser Ala Pro His Leu Ala Asn Ala Thr Leu Glu Thr Glu Trp Phe His
121     210                 215                 220
122 Gly Leu Arg Arg Lys Trp Arg Pro His Leu His Arg Arg Gly Pro Asn
123 225                 230                 235                 240
124 Gln Gly Pro Arg Gly Leu Gly His Ser Trp Arg Arg Lys Asp Gly Leu
125                 245                 250                 255
126 Gly Gly Asp Lys Ser His Phe Lys Trp Ser Pro Pro Tyr Leu Glu Cys
127                 260                 265                 270
128 Glu Asn Gly Ser Tyr Lys Pro Gly Trp Leu Val Thr Leu Ser Ser Ala
129     275                 280                 285
130 Ile Tyr Gly Leu Gln Pro Asn Leu Val Pro Glu Phe Arg Gly Val Met
131     290                 295                 300
132 Lys Val Asp Ile Asn Leu Gln Lys Val Asp Ile Asp Gln Cys Ser Ser
133 305                 310                 315                 320
134 Asp Gly Trp Phe Ser Gly Thr His Lys Cys His Leu Asn Asn Ser Glu
135                 325                 330                 335
136 Cys Met Pro Ile Lys Gly Leu Gly Phe Val Leu Gly Ala Tyr Glu Cys
137                 340                 345                 350
138 Ile Cys Lys Ala Gly Phe Tyr His Pro Gly Val Leu Pro Val Asn Asn
139         355                 360                 365
140 Phe Arg Arg Arg Gly Pro Asp Gln His Ile Ser Gly Ser Thr Lys Asp
141     370                 375                 380
142 Val Ser Glu Glu Ala Tyr Val Cys Leu Pro Cys Arg Glu Gly Cys Pro
143 385                 390                 395                 400
144 Phe Cys Ala Asp Asp Ser Pro Cys Phe Val Gln Glu Asp Lys Tyr Leu
145                 405                 410                 415
146 Arg Leu Ala Ile Ile Ser Phe Gln Gly Leu Cys Met Leu Leu Asp Phe
147                 420                 425                 430
148 Val Ser Met Leu Val Val Tyr His Phe Arg Lys Ala Lys Ser Ile Arg
149         435                 440                 445
150 Ala Ser Gly Leu Ile Leu Leu Glu Thr Ile Leu Phe Gly Ser Leu Leu
151     450                 455                 460
152 Leu Tyr Phe Pro Val Val Ile Leu Tyr Phe Glu Pro Ser Thr Phe Arg
153 465                 470                 475                 480
154 Cys Ile Leu Leu Arg Trp Ala Arg Leu Leu Gly Phe Ala Thr Val Tyr
155                 485                 490                 495
156 Gly Thr Val Thr Leu Lys Leu His Arg Val Leu Lys Val Phe Leu Ser
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160 Met Leu Ala Val Ile Leu Leu Val Val Phe Trp Phe Leu Ile Gly Trp
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162 Thr Ser Ser Val Cys Gln Asn Leu Glu Lys Gln Ile Ser Leu Ile Gly
163 545                550                555                560
164 Gln Gly Lys Thr Ser Asp His Leu Ile Phe Asn Met Cys Leu Ile Asp
165                565                570                575
166 Arg Trp Asp Tyr Met Thr Ala Val Ala Glu Phe Leu Phe Leu Leu Trp
167                580                585                590
168 Gly Val Tyr Leu Cys Tyr Ala Val Arg Thr Val Pro Ser Ala Phe His
169         595                600                605
170 Glu Pro Arg Tyr Met Ala Val Ala Val His Asn Glu Leu Ile Ile Ser
171     610                615                620
172 Ala Ile Phe His Thr Ile Arg Phe Val Leu Ala Ser Arg Leu Gln Ser
173 625                630                635                640
174 Asp Trp Met Leu Met Leu Tyr Phe Ala His Thr His Leu Thr Val Thr
175                645                650                655
176 Val Thr Ile Gly Leu Leu Leu Ile Pro Lys Phe Ser His Ser Ser Asn
177         660                665                670
178 Asn Pro Arg Asp Asp Ile Ala Thr Glu Ala Tyr Glu Asp Glu Leu Asp
179         675                680                685
180 Met Gly Arg Ser Gly Ser Tyr Leu Asn Ser Ser Ile Asn Ser Ala Trp
181     690                695                700
182 Ser Glu His Ser Leu Asp Pro Glu Asp Ile Arg Asp Glu Leu Lys Lys
183 705                710                715                720
184 Leu Tyr Ala Gln Leu Glu Ile Tyr Lys Arg Lys Lys Met Ile Thr Asn
185                725                730                735
186 Asn Pro His Leu Gln Lys Lys Arg Cys Ser Lys Lys Gly Leu Gly Arg
187         740                745                750
188 Ser Ile Met Arg Arg Ile Thr Glu Ile Pro Glu Thr Val Ser Arg Gln
189         755                760                765
190 Cys Ser Lys Glu Asp Lys Glu Gly Ala Asp His Gly Thr Ala Lys Gly
191     770                775                780
192 Thr Ala Leu Ile Arg Lys Asn Pro Pro Glu Ser Ser Gly Asn Thr Gly
193 785                790                795                800
194 Lys Ser Lys Glu Glu Thr Leu Lys Asn Arg Val Phe Ser Leu Lys Lys
195                805                810                815
196 Ser His Ser Thr Tyr Asp His Val Arg Asp Gln Thr Glu Glu Ser Ser
197                820                825                830
198 Ser Leu Pro Thr Glu Ser Gln Glu Glu Glu Thr Thr Glu Asn Ser Thr
199         835                840                845
200 Leu Glu Ser Leu Ser Gly Lys Lys Leu Thr Gln Lys Leu Lys Glu Asp
201     850                855                860
202 Ser Glu Ala Glu Ser Thr Glu Ser Val Pro Leu Val Cys Lys Ser Ala
203 865                870                875                880
204 Ser Ala His Asn Leu Ser Ser Glu Lys Lys Thr Gly His Pro Arg Thr
205                885                890                895
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207         900             905             910
208 Thr Leu Gly Leu Ala Gly Lys Thr Gln Thr Ala Gly Val Glu Glu Arg
209         915             920             925
210 Thr Lys Ser Gln Lys Pro Leu Pro Lys Asp Lys Glu Thr Asn Arg Asn
211     930             935             940
212 His Ser Asn Ser Asp Asn Thr Glu Thr Lys Asp Pro Ala Pro Gln Asn
213 945             950             955             960
214 Ser Asn Pro Ala Glu Glu Pro Arg Lys Pro Gln Lys Ser Gly Ile Met
215         965             970             975
216 Lys Gln Gln Arg Val Asn Pro Thr Thr Ala Asn Ser Asp Leu Asn Pro
217         980             985             990
218 Gly Thr Thr Gln Met Lys Asp Asn Phe Asp Ile Gly Glu Val Cys Pro
219         995             1000            1005
220 Trp Glu Val Tyr Asp Leu Thr Pro Gly Pro Val Pro Ser Glu Ser Lys
221     1010            1015            1020
222 Val Gln Lys His Val Ser Ile Val Ala Ser Glu Met Glu Lys Asn Pro
223 1025            1030            1035            1040
224 Thr Phe Ser Leu Lys Glu Lys Ser His His Lys Pro Lys Ala Ala Glu
225             1045            1050            1055
226 Val Cys Gln Gln Ser Asn Gln Lys Arg Ile Asp Lys Ala Glu Val Cys
227         1060            1065            1070
228 Leu Trp Glu Ser Gln Gly Gln Ser Ile Leu Glu Asp Glu Lys Leu Leu
229         1075            1080            1085
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231     1090            1095            1100
232 Gly Gln Pro Arg Ala Ala Asn Val Cys Ala Gly Gln Ser Glu Glu Leu
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234 Pro Pro Lys Ala Val Ala Ser Lys Thr Glu Asn Glu Asn Leu Asn Gln
235             1125            1130            1135
236 Ile Gly His Gln Glu Lys Lys Thr Ser Ser Ser Glu Glu Asn Val Arg
237         1140            1145            1150
238 Gly Ser Tyr Asn Ser Ser Asn Asn Phe Gln Gln Pro Leu Thr Ser Arg
239         1155            1160            1165
240 Ala Glu Val Cys Pro Trp Glu Phe Glu Thr Pro Ala Gln Pro Asn Ala
241     1170            1175            1180
242 Gly Arg Ser Val Ala Leu Pro Ala Ser Ser Ala Leu Ser Ala Asn Lys
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VERIFICATION SUMMARY   DATE: 07/19/2001
PATENT APPLICATION: US/09/775,181   TIME: 12:02:42

Input Set : **A:\LEX-0129-USA SEQLIST.txt**
Output Set: **N:\CRF3\07192001\I775181.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date